

**REMARKS**

With entry of the amendment, claims 32-50 are pending. Claims 32-48 are under consideration, and claims 49 and 50 are withdrawn from consideration. Applicants wish to thank the Examiner for rejoining Groups I and II. Group III claim 49 has been amended to depend from claim 32. In the event that claim 32 is ultimately deemed to be allowable, Applicants respectfully request rejoinder of Group III claims 49 and 50 at that time.

Claims 32 and 48 have been amended to more specifically direct the claims to cells capable of initiating hair follicle neogenesis comprising epidermal and dermal cells. Support for these amendments can be found at least at page 10, line 28 to page 11, line 35. Applicants respectfully assert that no new matter is introduced by way of the amendments to the claims. Applicants respectfully request withdrawal and reconsideration of the outstanding rejections.

Applicants have resubmitted Figs. 4-6 as black and white photographs in response to the objection to the drawings. In addition, the specification has been amended to indicate that the photographs are in black and white.

***Objections to the Drawings***

The drawings stand objected to as not properly indicating whether or not the photographs were in color or black and white. Applicants thank the examiner for the courtesies extended during the telephone call of April 11, 2007 during which the objection to the drawings was clarified. In response, Applicants have resubmitted Figs. 4-6 as black and white photographs and amended the description of Fig. 6 to indicate that it is a black and white photograph. Applicants therefore request that the objection be withdrawn.

***Rejections under 35 U.S.C. § 102(b)***

Claims 32-45 and 48 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Application No. 2003/0049839 (Romero-Ortega et al.). The Examiner asserts that Romero-Ortega et al. teaches a graft comprising a central lumen and skin cells, including epidermal and dermal cells, disposed within and adjacent to the lumen. Applicants respectfully submit that the claims, as amended, are not anticipated by Romero-Ortega et al.

The Manual of Patent Examining Procedure ("MPEP") § 2131 states that, in order to anticipate a claim, a reference must teach every element of the claim:

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California* 814 F.2d 628, 631, 2 U.S.P.Q. 2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the . . . claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1222, 1236, 9 U.S.P.Q. 2d 1913, 1920 (Fed. Cir. 1989).

MPEP § 2131.

Applicants have amended claims 32 and 48 to specify that the epidermal and dermal cells disposed within the lumen are capable of initiating hair follicle neogenesis. (See language of amended claim 32.) Although Romero-Ortega et al. briefly mentions that its scaffolds may be used for tissue engineering of skin, among a list of other possible tissues, Romero-Ortega et al. does not specifically teach a graft comprising epidermal or dermal cells, let alone a graft comprising cells capable of initiating hair follicle neogenesis. Moreover, there is absolutely no mention of such cells in Romero-Ortega et al. Indeed, the specification of the present application discloses that tissue engineered skin is typically devoid of hair follicles. (Application, page 10, lines 29-32). Therefore, Romero-Ortega et al. does not disclose each and every element of the claimed invention for at least the reasons discussed above.

Limitation  
not read  
into claim

Because claims 33-45 depend directly or indirectly from claim 32, they are patentable for at least the same reasons as claim 32. Applicant respectfully requests that the rejection of claims 32-45 and 48 over Romero-Ortega et al. be withdrawn.

#### ***Rejections Under 35 U.S.C. § 103(a)***

Claims 46 and 47 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Romero-Ortega et al., in view of U.S. Patent Application No. 2003/0090725 (Simpson et al.). The Examiner states that one of ordinary skill in the art would have been motivated to combine the teachings of Romero-Ortega et al. and Simpson et al. to provide a bioabsorbable material having cell attachment binding site moieties as claimed. Simpson et al. does not teach the use of cells capable of initiating hair follicle neogenesis.

Applicants assert that according to case law and § 2142 of the MPEP in combination with the claim amendments, a *prima facie* case of obviousness cannot be established based on the teachings of Romero-Ortega et al. and Simpson et al. "To establish a *prima facie* case of

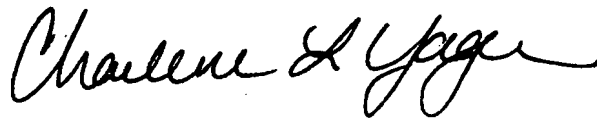
Response dated April 11, 2007

obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art." *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974). Simpson et al. does not cure the deficiency of Romero-Ortega et al., because it does not teach the use of cells capable of initiating hair follicle neogenesis. Therefore, neither Romero-Ortega et al. nor Simpson et al., alone or in combination, teach or suggest all of the limitations of claim 32-48.

In view of the foregoing it is believed that this application is now in condition for allowance. Should any issues remain, the Examiner is invited to contact the undersigned at the phone number below.

No fee is believed due in connection with this submission. However, if a fee is owed, please charge Deposit Account No. 50-0842 for such fee. Should any questions remain, the Examiner is encouraged to contact the undersigned at 608-257-3501.

Respectfully submitted,



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